

CLAIMS

What is claimed is:

1. A computer readable medium storing a computer program comprising:
program instructions to create event translators that translate incoming input events into translated input events according to user-defined translation behaviors;
program instructions to enable a user to associate each event translator with a type of incoming input event; and
program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input event of the type of incoming input event associated with the event translator.
2. The computer readable medium storing a computer program of claim 1, wherein program instructions to create event translators that translate incoming input events into translated input events according to user-defined translation behaviors comprise program instructions to create one or more operating system hooks to detect event messages associated with incoming input events corresponding to one or more types of computer input devices.
3. The computer readable medium storing a computer program of claim 1, wherein program instructions to create event translators that translate incoming input events into translated input events according to user-defined translation behaviors comprise program instructions to create one or more operating system hooks to receive event messages associated with incoming input events corresponding to one or more types of computer input devices.

4. The computer readable medium storing a computer program of claim 1, wherein program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input event of the type of incoming input event associated with the event translator comprises program instructions to define an incoming-to-translated input event mapping that sets the type of translated input event to be generated.

5. The computer readable medium storing a computer program of claim 1, wherein program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input event of the type of incoming input event associated with the event translator comprises program instructions to define a translation function that modifies incoming input events according to one or more user-configured functions.

6. The computer readable medium storing a computer program of claim 1, wherein program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input event of the type of incoming input event associated with the event translator comprises program instructions to determine whether the incoming input event is swallowed or passed-through.

7. The computer readable medium storing a computer program of claim 1, wherein program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input event of the type of incoming input event associated with the event

translator comprises program instructions to determine whether the incoming input event causes a one-shot translated input event or causes a repeating translated input event.

8. The computer readable medium storing a computer program of claim 1, wherein program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input event of the type of incoming input event associated with the event translator comprises program instructions to determine whether the incoming input event triggers an activation of or a focus shift to a targeted program.

9. The computer readable medium storing a computer program of claim 1, further comprising program instructions to display a graphical user interface on a display screen of a computer system associated with the computer readable medium, and wherein the graphical user interface is configured to enable a user to graphically define one or more event translators, and graphically link one or more selected incoming input events to one or more translated input events through the one or more graphically defined event translators.

10. The computer readable medium storing a computer program of claim 9, wherein the graphical user interface is configured to present a user with visual depictions of available incoming input event types and to enable the user to drag-n-drop selected ones of those incoming input event types into an input event field, and into a translated input event field, and to make desired event translation connections between respective incoming input events in the input event field and respective translated input events in the translated input event field.

11. A method of adapting a computer such that its response to one or more types of input events is modified according to user-configured event translation behavior, the method comprising:

defining one or more event translators, wherein each event translator maps incoming input events of a selected type into translated input events according to a defined translation behavior;

configuring the defined translation behavior for each event translator based on user input; and

detecting incoming input events of the selected types and translating those incoming input events into corresponding translated input events according to the defined translation behaviors of the one or more event translators.

12. A method of modifying input event behavior in a computer, the method comprising:

defining one or more event translators and associating each event translator with a selected type of incoming input event responsive to input by a user;

defining a translation behavior of each event translator responsive to input by a user; and

generating translated input events based on executing associated ones of the event translators responsive to detecting incoming input events of the selected types.

13. The method of claim 12, wherein generating translated input events based on executing associated ones of the event translators responsive to detecting incoming input events of the selected types comprises:

detecting operating system events associated with the selected types of incoming input events; and
for each detected incoming input event of a selected type, translating that incoming input event according to the translation behavior defined the associated event translator or translators.

14. A computer readable medium storing a computer program, the computer program comprising:

program instructions to enable a user to select a type of input event from a plurality of input event types;
program instructions to determine whether a given input event occurring during execution of the computer program matches the selected type of input event; and
program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event.

15. The computer readable medium storing a computer program of claim 14, wherein the computer program comprises a WINDOWS-based program configured for execution on a WINDOWS-based computer.

16. The computer readable medium storing a computer program of claim 14, wherein the program instructions to enable a user to select a type of input event from a plurality of input event types comprise program instructions to enable selection from a plurality of event types include two or more of mouse events, keyboard events, MIDI events, Universal Serial Bus device events, RS-232 serial bus events, game port events, audio input events, analog input events, and infrared port events.

17. The computer readable medium storing a computer program of claim 14, wherein the program instructions program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event comprise program instructions to perform one or more of a plurality of translations comprising a re-mapping of the given input event type to one or more other input event types, a time-delay of the given input event, a parameter modification of the given input event, a swallowing of the given input event to hide it from one or more other computer processes, and a swallowing of the given input event to hide it from additional event translation processing.

18. The computer readable medium storing a computer program of claim 14, wherein the program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event comprise program instructions to re-map input events of the selected type into input events of at least one other type.

19. The computer readable medium storing a computer program of claim 14, wherein the program instructions to perform a desired input event translation by processing the

given input according to one or more input event translation rules if the given input event matches the selected type of input event comprise program instructions to modify one or more event parameters of input events of the selected type.

20. The computer readable medium storing a computer program of claim 14, wherein the program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event comprise program instructions to time-delay input events of the selected type according to a desired time delay value.